ABSTRACT OF THE DISCLOSURE

A device for abrading a wooden barrel (13) includes a robot having elements (11, 17, 23) for loading a barrel (13), elements (29a, 29b, 33a, 33b) for gripping and rotating the barrel (13) around the axis thereof, elements (43a, 43b) for extracting and re-positioning the two bilge hoops of the barrel, elements (53) for abrading the barrel, and elements (69) for removing the barrel (13).